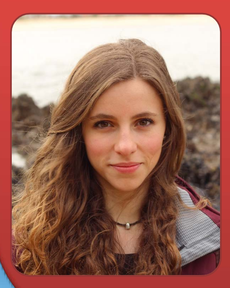

Predictive distribution habitat models for common dolphin *(Delphinus delphis)* in the North and NW of Spain.

MO06

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Introduction and Methods

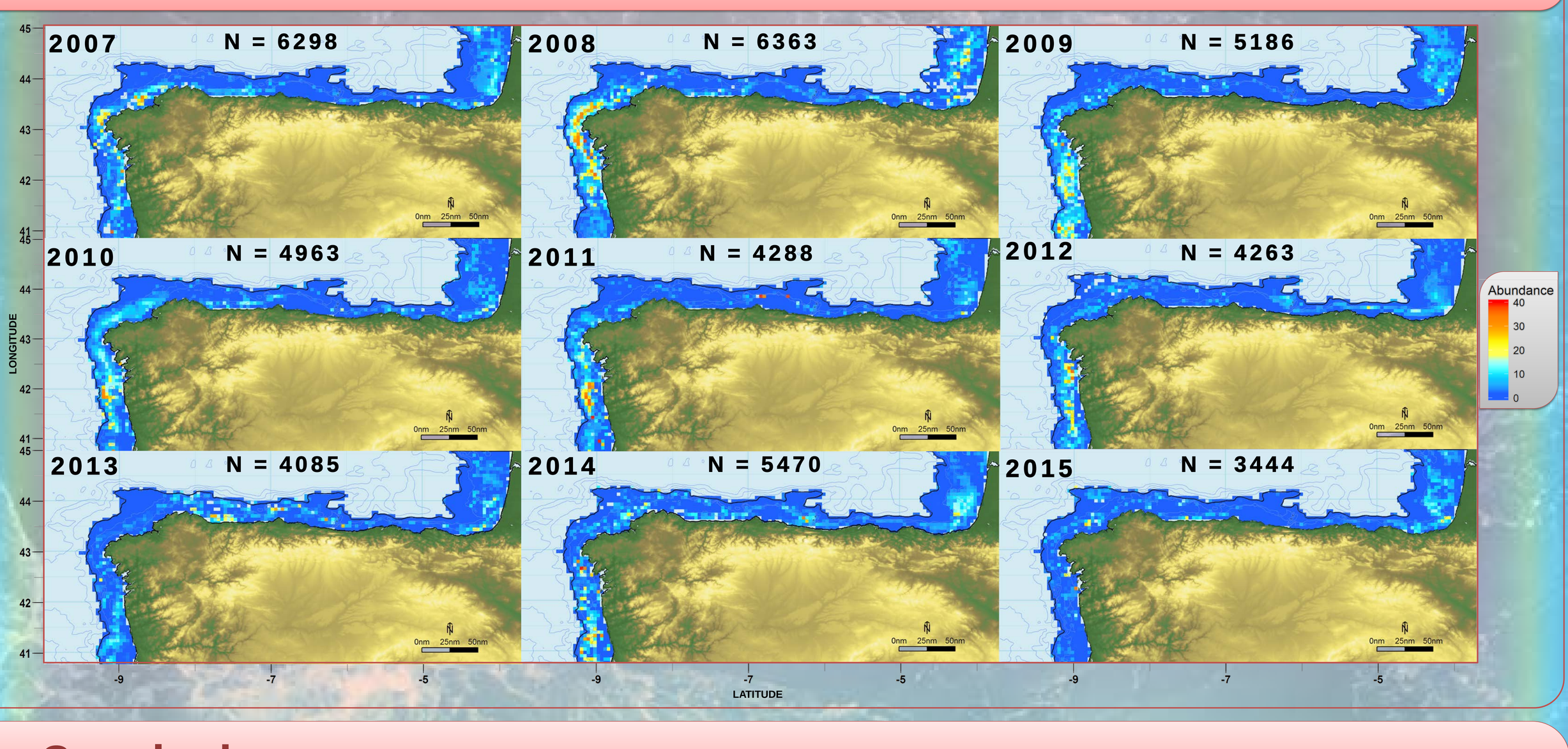
Sightings of marine mammals have been collected annually (2007-2015) using line-transect methodology onboard the IEO spring acoustic surveys in the N and NW of Spain.

We have analysed common dolphin sightings (the most sighted species, X = 15 ± 5 groups/year) to estimate abundance and describe habitat use.

The selected distance sampling half normal detection function included two covariates (log(GroupSize)) and Beaufort) while the final density surface model (DSM) for predicting abundance and distribution included bathymetry and satellite derived data (SST and CHL-a).

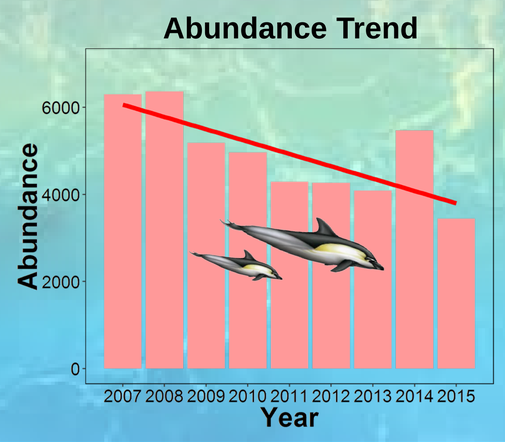
$$DSM = N \sim s(Bathymetry) + s(SST\text{-}March) + s(CHLa\text{-}April) + \varepsilon$$

Results: Common dolphin abundance and distribution maps



Conclusions

Highest abundances were observed in upwelling areas and in the area of influence of the Miño river plume (west coast). The annual estimates show a weak declining trend in abundance over the years.



We have developed the first density surface model for common dolphins in the region. These model is an useful tool to help detect areas where dolphins could be at risk of bycatch in fishing gear, one of the main causes of mortality in the region.

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